BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of the work: **Estimate for Improvements to roads and drains at Tatanagara surroundings in ward no. 8, kodigehalli sub-division**

								Estimate Cost:	4900000.00	
Sl. No	Description	Unit	No.	L	B	D		Qty	Rate	Amount
1	Removing B.S Slab of Drain and stacking Page No. 25 / Item No. 5.32 / PWD SR 2014-15									
	Covering slab for desilting									
	11th main road	Sqm	1	32.60	1.50			48.90		
	4th main, 1st crs road	Sqm	1	22.20	1.50			33.30		
	4th main, 2nd crs road	Sqm	2	18.20	1.50			54.60		
	6th cross road	Sqm	1	27.00	1.50			40.50		
	Resetting existing drain slabs									
	11th main road	Sqm	1	326.00	1.65			537.90		
	4th main, 1st crs road	Sqm	1	111.00	1.65			183.15		
	4th main, 2nd crs road	Sqm	2	91.00	1.65			300.30		
	6th cross road	Sqm	1	150.00	1.65			247.50		
								1446.15	58.32	84339.00
	Basic Rate	54.00								
	Area Weightage @ 8%	4.32								
	Total	58.32								
2	Refixing stone slabs of drains and pointing in C.M (1:3) Page No. 25 / Item No. 5.33 / PWD SR 2014-15									
	90 % of the quantity vide item No. 1	Sqm	Qty Vide Item No. 1					1373.84	75.60	103862.00
	Basic Rate	70.00								
	Area Weightage @ 8%	5.60								
	Total	75.60								
3	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete - 10.0 cms thick (P.No.28, I.No.5.31.1 of PW,P&IWTD SR 2014-15.)									
	Balance qty vide item No. 1 & 2	sqm						72.31		
	4th main, 1st crs road	sqm	1	111.00	1.65			183.15		
								255.46	704.16	179885.00
	Basic Rate Rs.	652.00								
	Add 8% A.W Rs.	52.16								
	Total Rate Rs.	704.16								
4	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. Page No. 138 / Item No. 19.1/ PWD SR 2014-15									
	Drain desilting									
	11th main road	Cum	1	326.00	0.50	0.60		97.80		
	4th main, 1st crs road	Cum	2	111.00	0.50	0.60		66.60		
	4th main, 2nd crs road	Cum	2	91.00	0.50	0.60		54.60		
	6th cross road	Cum	1	150.00	0.60	0.60		54.00		
	for road formation									
	4th main, 1st crs road	Cum	1	111.00	4.60	0.25		127.65		
	4th main, 2nd crs road	Cum	1	91.00	6.00	0.25		136.50		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	6th cross road - cc road	Cum	1	150.00	5.50	0.25	206.25		
	culverts across cross roads	Cum	3	7.00	2.20	1.20	55.44		
	Pot hole filling - cross roads	Cum	55	2.00	2.50	0.30	82.50		
							881.34	75.60	66629.00
	Basic Rate	70.00							
	Area Weightage @8%	5.60							
	Total	75.60							
5	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. No. 12/ Item No. 4.3/ PWD SR 2014-15								
	6th cross road - cc road	Cum	1	150.00	5.50	0.15	123.75		
	culverts across cross roads	Cum	3	7.00	2.20	0.15	6.93		
							130.68	4847.04	633411.00
	Basic Rate	4488.00							
	Area Weightage @8%	359.04							
	Total	4847.04							
6	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 23 / Item No. 5.12 / PWD SR 2014-15								
	culverts across cross roads	Cum	6	7.00	0.60	0.90	7.56		
							7.56	4773.60	36088.00
	Basic Rate	4420.00							
	Area Weightage @ 8%	353.60							
	Total	4773.60							
7	KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. Page No. 109 / Item No. 15.4 / PWD SR 2014-15								
	culverts across cross roads	Sqm	12	7.00		0.90	12.60		
							12.60	92.88	1170.00
	Basic Rate	86.00							
	Area Weightage @ 8%	6.88							
	Total	92.88							
8	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. No. 12/ Item No. 4.6/ PWD SR 2014-15								
	coping	Cum	6	7.00	0.60	0.10	2.52		
	Ramp	Cum	6	7.00	0.60	0.15	1.26		
							3.78	5327.64	20138.00
	Basic Rate	4933.00							
	Area Weightage @ 8%	394.64							
	Total	5327.64							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
9	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, No. 13/ Item No. 4.11/ PWD SR 2014-15								
	deck slab	cum	3	7.00	1.80	0.225	8.50		
							8.50	6065.28	51555.00
	Basic Rate	5616.00							
	Area Weightage @ 8%	449.28							
	Total	6065.28							
10	KSRB 4.9.1: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 17 / Item No. 4.46.3 / PWD SR 2014-15								
	For slab @ 70 Kg / Cum	Tonne	0.70	8.50			0.60	79056.00	47038.00
	Basic Rate	73200.00							
	Area Weightage @ 8%	5856.00							
	Total	79056.00							
11	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 15 / Item No. 4.31/ PWD SR 2014-15								
	Beneath slab	Sqm	3	7.00	0.90		18.90		
	sides of slab	Sqm	6	7.00		0.225	9.45		
		Sqm	6	1.80		0.225	2.43		
							30.78	292.68	9009.00
	Basic Rate	271.00							
	Area Weightage @ 8%	21.68							
	Total	292.68							
12	KSRB- 4-1.5 : Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300 kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregares @ 0.43 cum with superplastisiser @ 3lts confirming to IS9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2, No. 12/ Item No. 4.5/ PWD SR 2014-15								
	6th cross road - cc road	Cum	1	150.00	5.50	0.10	82.50		
		Cum					82.50	5852.52	482833.00
	Basic Rate	5419.00							
	Area Weightage @8%	433.52							
	Total	5852.52							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
13	Vaccum De-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift No. 171 / Item No. 22.7 / PWD SR 2014-15								
	6th cross road - cc road	Sqm	1	150.00	5.50		825.00		
		Sqm					825.00	97.20	80190.00
	Basic Rate	90.00							
	Area Weightage @8%	7.20							
	Total	97.20							
14	Providing groove cutting for cement pavement wifth of 5mm to 10mm and depth 800mm-100mm including cost of cutting machine, generator and HOM of machinery, including cost of blade, coolant etc, including cleaning of groove and providing sand and hot bitumen fillarsm and filler metal etc including of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications Page No. 172 / Item No. 22.8 / PWD SR 2014-15								
	6th cross road - cc road	Rmt	8	5.50			44.00		
		Rmt					44.00	124.20	5465.00
	Basic Rate	115.00							
	Area Weightage @8%	9.20							
	Total	124.20							
15	KSRRB 500-3: Scarifying existing stone metal layer upto 75mm thick along with their bituminous surface, picking up scarified materials and stacking of old serviceable materials with lead of 100m, sequential spreading of the salvaged aggregates with fresh aggregates on prepared base and consolidating as per water bound macadam specifications including cost of all labour, HOM of machineries complete as per specifications. MORTH chapter 5, No. 157 / Item No. 21.3 / PWD SR 2014-15								
	pot hole filling	Sqm	55	2.00	2.50		275.00		
	11th main road	Sqm	1	326.00	7.00		2282.00		
							2557.00	82.94	212088.00
	Basic Rate	76.80							
	Area Weightage @ 8%	6.14							
	Total	82.94							
16	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications Page No. 154 / Item No. 20.18 PWD SR - 2014-15.								
	pot hole filling	Cum	55	2.00	2.50	0.20	55.00		
	11th main road	Cum	1	326.00	7.00	0.30	684.60		
	4th main, 1st crs road	Cum	1	111.00	4.60	0.30	153.18		
	4th main, 2nd crs road	Cum	1	91.00	6.00	0.30	163.80		
							1056.58	1438.56	1519954.00
	Basic Rate	1332.00							
	Area Weightage @ 8%	106.56							
	Total	1438.56							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
17	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 P. 157 / I. 21.1 PWDSR 2014-15								
	pot hole filling	Sqm	55	2.00	2.50		275.00		
	11th main road	Sqm	1	326.00	7.00		2282.00		
	4th main, 1st crs road	Sqm	1	111.00	4.60		510.60		
	4th main, 2nd crs road	Sqm	1	91.00	6.00		546.00		
							3613.60	12.20	44100.00
	Basic Rate	11.30							
	Area Weightage @ 8%	0.90							
	Total	12.20							
18	KSRRB M500-6: Providing and applying primer coat for surfaces of medium porosity like cement stabilized soil base @ 1.10 Kg/Sqmt over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. MORTH specification NO. 502, Page No. 157 / Item No. 21.5 / PWD SR 2014-15								
	Qty vide item no. 17	Sqm	1				3613.60		
							3613.60	74.52	269285.00
	Basic Rate	69.00							
	Area Weightage @ 8%	5.52							
	Total	74.52							
19	KSRRB M500-18: Providing and laying semi dense bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 508 complete in all respects as per specifications. using 100-120 TPH capacity H.M.P with sensor paver grading II (25-30mm) with 5% CRMB-55 grade, No. 160 / Item No. 21.21.2 / PWD SR 2014-15								
	pot hole filling	Cum	55	2.00	2.50	0.025	6.88		
	11th main road	Cum	1	326.00	7.00	0.025	57.05		
	4th main, 1st crs road	Cum	1	111.00	4.60	0.025	12.77		
	4th main, 2nd crs road	Cum	1	91.00	6.00	0.025	13.65		
							90.34		
	Consider 10% For Depression Filling						9.03		
							99.37	8702.64	864816.00
	Basic Rate	8058.00							
	Area Weightage @ 8%	644.64							
	Total	8702.64							
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No. 178, Item No. 24.15 SR 2014-15)								
	11th main road	sqm	3	326.00	0.10		97.80		
	4th main, 1st crs road	sqm	3	111.00	0.10		33.30		
	4th main, 2nd crs road	sqm	3	91.00	0.10		27.30		
							158.40	475.20	75272.00
	Basic Rate Rs.	440.00							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Add 8% A.W Rs.	35.20							
	Total Rate Rs.	475.20							
21	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)								
			Vide Item No. 1				837.27	73.57	61598.00
	Average weight of earth 1.28 tonne / kg for 2x1.28x2.00=5.12	5.12							
	Add loading and unloading charges Vide item no.17.1 P.no.130	63.00							
		68.12							
	Area Weightage @ 8%	5.45							
	Total	73.57							
22	Sub Total								4848725.00
23	For Third Part QC inspection Charges @ 1% of Estimate Cost								48487.00
24	Miscellaneous and other Charges	L/S							2788.00
								Total	4900000.00
	(Rs. Forty Nine Lakhs Only)								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2014-15.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 8
BBMP

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR Rs. 49.00 lakhs
Rupees Forty Nine lakhs only
Under P-3089
Registered as EE ( ) No 9...9....
Subject to conditions contained in
enclosed memo EE ( ) No ...9/...
Dt JCE(YNK)/PA/A1 Estimate A/Sanctioned No 88/2015-16
dated 20/8/2015 Rs 49.00 lakhs.

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92.

Technical Sanction
Accorded For 49.00 lakh Rs.
Head of A/C P3089
CER NO : 38 **Dt:** 21.08.15

JA - CE (YNK)